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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,077	03/26/2004	Oren Etzioni	430558001US1	8067

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EXAMINER

NELSON, FREDA ANN

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/811,077

Applicant(s)

ETZIONI ET AL.

Examiner

Freda A. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/26/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 60-63 and 65-67 is/are allowed.
- 6) ☒ Claim(s) 1-50, 52, 54, 55, 57-59 and 64 is/are rejected.
- 7) ☒ Claim(s) 19, 20, 26-31, 34-37, 39-41, 43-48, 51, 53, and 56 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This is in response to a letter for a patent filed on March 26, 2004 in which claims 1-67 was presented for examination. Claims 1-67 are pending.

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 06/28/04 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. A copy of PTO-1449 is attached hereto.

#### ***Drawings***

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the informal drawings are not of sufficient quality. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

#### ***Specification***

3. The disclosure is objected to because of the following informalities:

Page 2, line 26, "future" should be "further".

Appropriate correction is required.

***Claim Objections***

4. Claim 44 is objected to because of the following informalities:

In claim 44, line 2, "time" should be "item".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4, 6, 9, and 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. In claims 1-4, 6, 9, and 11, the examiner is unable to determine what the applicant is claiming by the claim language "an optimal time".
7. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- "The examiner is unable to the determine what the applicant is claiming by the claim language "a good buy".
8. Claim 17 recites the limitation "the future" in line 7. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-51 and 59-67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 1-51 and 59-67 only recite an abstract idea. In claims 1-51 and 59-67, the recited steps of merely determining a predicted lifetime of one or more components of a laser system; estimating costs for the repair and/or replacement of the components in advance; and scheduling the costs to be paid does not apply, involve, use, or advance the technological arts

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since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is for a "computing system". Looking at the claim as a whole, nothing the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-51 and 59-67 are deemed to be directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 17-18, 22-25, 31, 33, 38, 42, 44, and 49-50, 52, 54-55, 57-59 and 64, are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al. (US PG Pub. 2002/0120492) in view of Reece (US PG Pub. 2003/0061179).

In claims 17, 23-25, 31, 33, 38, 42, 44, and 49-50, Phillips et al. disclose that the event revenue management system may be used in many different areas, including pricing of hotel rooms, airline seats, cruise tickets, tour tickets, and concert tickets (paragraph 0032). Phillips et al. further disclose that an event may be defined by the combination of a venue configuration, date, time, and/or event type; an event may be singular or a part of series; and if it is a single event, there is preferably at least one historical event that may be considered representative of the single event; and if there are multiple events, the attendance preferably follows predictable patterns based on time of day, day of week, and/or season (paragraph 0030). Phillips et al. still further disclose a method and system for managing event revenue by forecasting future demand of an event based on parameters, historical data, and current data, and by optimizing ticket pricing based on the forecasted future demand (paragraph 0012).

Phillips et al. does not disclose automatically determining whether to accept the current price for the one item based at least in part on the automatically predicted future price change for the one item. Reece discloses that in a very basic implementation, the user may either accept the higher price and continue the communication, or reject the price and cancel the communication (paragraph 0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Phillips et al. to include the feature of Reece in order to enable the user to reschedule the purchase for a time when the threshold is met, or restructure the purchase type (amount), or cancel the purchase (Reece; paragraph 0007).

In claims 18 and 22, Phillips et al. disclose that the event parameters include timing, resource, and discount categories. Phillips et al. does not disclose that the one item has an associated expiration and/or use time, and wherein prices for the one item change based at least in part on a relationship between a current time and the associated time. Reece discloses that yield management systems are commonly found in industries with high fixed costs and constantly expiring inventory, such as airlines, hotels, and car rental companies. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Phillips et al. to

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include the feature of Reece in order to price perishable items based on their expiration time.

In claims 52 and 54-55, Phillips et al. disclose a computer program product for managing event revenue wherein the event has event parameters including timing, resource, and discount categories. Phillips et al. further disclose that the computer program product includes computer readable program codes configured to: (1) initialize forecasting parameters; (2) aggregate historical data using the forecasting parameters to generate initial forecast statistics, taking into account the event parameters; (3) forecast demand by updating the initial forecast statistics based on current data; and (4) optimize pricing of the event (paragraph 0017).

In claims 57-59 and 64, Phillips et al. disclose that the event revenue management system may be used in many different areas, including pricing of hotel rooms, airline seats, cruise tickets, tour tickets, and concert tickets (paragraph 0032). Phillips et al. further disclose that an event may be defined by the combination of a venue configuration, date, time, and/or event type; an event may be singular or a part of series; and if it is a single event, there is preferably at least one historical event that may be considered representative of the single event; and if there are multiple events, the attendance preferably follows predictable patterns based on time of day, day of week, and/or season (paragraph 0030). Phillips et al. still further disclose a method and system for managing event revenue by forecasting future demand of an event based on parameters, historical data, and current data, and by optimizing ticket pricing based on the forecasted future demand (paragraph 0012).

Phillips et al. does not disclose automatically determining whether to accept the current price for the one item based at least in part on the automatically predicted future price change for the one item. Reece discloses that in a very basic implementation, the user may either accept the higher price and continue the communication, or reject the price and cancel the communication (paragraph 0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Phillips et al. to include the feature of Reece in order to enable the user to reschedule the purchase for a time when the threshold is met, or restructure the purchase type (amount), or cancel the purchase (Reece; paragraph 0007).

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al. (US PG Pub. 2002/0120492) in view of Reece (US PG Pub. 2003/0061179) in further view of Phillips et al. (US PG Pub.



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2002/0116348).

In claim 21, Phillips et al. ('492) does not disclose that prices for the one item change in a controlled manner based at least in part on one or more factors and/or algorithms, and wherein those factors and/or algorithms are not identified. Phillips et al. ('348) disclose that one problem is that most sellers keep incomplete pricing data for example, while the ideal client for the system would maintain data on lost customers, competitor prices, industry availability and the like, most sellers will have data on only a subset of the potential drivers of market response (paragraph 0004). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Phillips et al. ('492) to include the feature of Phillips et al. ('348) in order to accommodate sellers who cannot identify all the factors affecting prices.

### ***Conclusion***

12. The following is an examiner's statement of reasons for allowance:

A) The prior art for example:

(1) Phillips et al. (US PG Pub. 2002/0120492) disclose an event revenue management system.

(2) Phillips et al. (US PG Pub. 2002/0116348) disclose a dynamic pricing system.

(3) Reece (US PG Pub. 2003/0061179) discloses threshold pricing in dynamically priced telecommunications systems.

However, in regard to claims 1-16, 19-20, 26-30, 32, 34-37, 39-41, 43, 45-48, 51, 53-56, 60-63, and 65-67 the prior art does not teach or suggest specific manner in which the price is predicted and customers are advised to purchase airline tickets based on current prices.

13. The examiner has cited prior art of interest, for example:

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1) Walker et al. (Patent Number 6,112,185), automated service upgrade offer acceptance system.

2) Walker et al. (Patent Number 6,418,415), which disclose a system method for aggregating multiple buyers utilizing conditional purchase offers (CPOS).

3) Walker et al. (US PG Pub. 2002/Patent Number 6,112,185), which disclose a method and apparatus for utilizing demand information at a vending machine.

4) Wu et al. (US PG Pub.2003/0225608), which disclose a value knowledge management system.

5) Kenigsberg et al. (US PG Pub. 2003/0036928), which disclose must fly.

6) Bulan (US PG Pub. 2003/0187771) which discloses an investment management system.

7) Richards (US PG Pub. 2001/0039519), which discloses a cooperative buying system for purchasing consumer products using a computer network.

8) Rivalwatch.com

9) Davis et al., "BLUR--the speed of change in the connected economy", Sep/Oct 2000, British Journal of Administrative Management, n22, PP: 20.

10) Chmielewski, Dawn C., "San Francisco-Based Firm Develops Technology for Interactive TV", April 19, 2001, KRTBN Knight Ridder Tribune Business News(san Jose Mercury News-California).

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14. Claims 19-20, 26-31, 34-37, 39-41, 43, 45-48, and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.

15. The shortened statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.

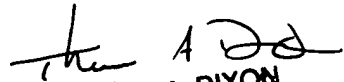
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FAN 05/27/2005

  
THOMAS A. DIXON  
PRIMARY EXAMINER